

STAT

Page Denied

STAT

CZECHOSLOVAK PARTICIPATION IN 13TH INTERNATIONAL
CONGRESS OF PURE AND APPLIED CHEMISTRY IN STOCKHOLM

Academician R. Brdicka,
Czechoslovak Academy of Sciences

Vestník Československé Akademie Ved
Prague, Vol LXII, No 7/8, 1953

The International Union of Pure and Applied Chemistry, of which Czechoslovakia is one of 35 member countries, held its 13th International Congress and 17th Conference of Scientific Commission Work Groups in Stockholm and Uppsala 29 July-7 August 1953. The main themes discussed were in the field of physical chemistry and were divided among 12 discussion groups, according to department or specialty. In addition, three groups held simultaneous seminars on the chemistry of wood and on macromolecules, which continued after 4 August 1954 in Uppsala.

F. Sorm, chief secretary of the Czechoslovak Academy of Sciences, and Academician R. Brdicka, member of the International Union of Pure and Applied Chemistry, represented the Czechoslovak Chemical Association, which is now attached to the Chemical Section of the Czechoslovak Academy of Sciences.

The congress, attended by some 1,500 delegates from 28 member countries, opened in the Concert Hall of Stockholm on 29 July 1953. Prof L. Pauling of Pasadena gave the opening lecture on "Stochastic Method and the Structure of Proteins." Among those present were the following: Prof T. Svedberg, honorary president of the congress; Prof A. Tiselius, president of the union; Prof E. W. R. Steacie, president of the Physical Chemistry Section of the union; and nine Nobel Prize winners. Delegates from member countries filled the front rows of the auditorium.

The USSR was represented by Academician M. M. Dubinin; G. S. Zhdanov; Dr Ye. D. Kaverzneva; and Dr K. T. Poroshin. Czechoslovak, Hungarian, GDR, and Polish delegations represented the People's Democracies.

On the afternoon of the opening day, reports and lectures were delivered according to schedule. The main topics covered in the physical chemistry groups were concentrated on the fields of the thermodynamics, electrochemistry, surface and colloidal chemistry, reaction kinetics, the chemistry of free radicals, photochemistry, and the structure of matter. Important for Czechoslovakia was the fact that 3 half-days were devoted to polarography by the electrochemistry group. The group was to be presided over by Academician J. Heyrovsky, originator of polarography, who was scheduled to present two original works. Despite his absence from the congress, Heyrovsky was made honorary chairman of the group.

Academician Brdicka read a report on the determination of velocity constants of reaction proceeding at polarographic electrode. In his lecture, Brdicka reported the latest results achieved in studying that problem, which he originated and has been working on for the past 10 years with his coworkers. The Prague school has successfully maintained its high world-wide standing ahead of American, German, Japanese, and French authors in this field, mainly because of the work of Dr J. Koutecky, whose rigid mathematical concept of the problem was found to be the best.

A report on "Potentiometric Determination of Sodium by Glass Electrode" by O. Tomicek, corresponding member of the Czechoslovak Academy of Sciences, was read, in the author's absence, to the electrochemistry group.

STAT

On the morning of 31 July 1953, members of the seminar on the chemistry of wood, which was dealing with compounds present in wood in only minute quantities, heard a report by Academician F. Sorm on the progress made in the field of sesquiterpenes by the Institute of Organic Chemistry of the Czechoslovak Academy of Sciences. The report successfully demonstrated how correctly combined methods of separation and isolation revealed the presence of many sesquiterpene derivatives in the natural state of the materials tested. Successful isolation of sesquiterpene compounds in their pure state facilitated their identification according to their characteristic physical constants and also made possible an explanation of their molecular structure. The nature of their carbon chains was clarified by means of infrared spectroscopy. The classification of sesquiterpenes on the basis of their carbon groups clarified some questions of their biogenesis. These works were cited several times, and evaluated very highly, in the opening lecture by Prof L. Ruzicka, world renowned Swiss expert in the field of terpene chemistry. As a recognized specialist in his field, Academician Sorm was selected to preside over the discussion group in the afternoon.

Some 300 papers were read at the congress and were published in bound abstracts. The reports of Soviet scientists, given in Russian, were published in French by the Academy of Sciences USSR and distributed free of charge to delegates at the congress. Reports on macromolecules, given at the seminars in Stockholm and Uppsala will be published in full in Journal of Polymer Science, Volume XII, published in the US.

During the week-long congress in Stockholm, work groups of scientific commissions met under the auspices of the 17th Conference of Scientific Commission Work Groups of the Union. As a member of the Commission on Symbols and Terminology in Physical Chemistry, Academician Brdicka participated in a meeting of that commission which discussed international markings of physical chemistry compounds and conventional usage of terms.

Two large receptions were held for delegates to the congress during their stay in Stockholm, one at the Technical Museum and the other at the City Hall. Several parties were given by Swedish hosts in Stockholm and Uppsala for selected groups of scientists. Other social functions included visits to scientific institutions and industrial installations.

The scientific part of the congress, to which great care was devoted by the Swedish hosts, had a high standing and presented useful orientation about current problems in individual groups. It is believed that Czechoslovak participation in the congress helped to promote Czechoslovak science in the international forum and will result in the renewal of old, and the creation of new contacts with outstanding foreign specialists.

- E N D -

STAT